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DECEMBER 1948

TRADE IN GRAIN FUTURES

**U. S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.**

**ISSUED MONTHLY
BY**

**COMMODITY
EXCHANGE
AUTHORITY**

Vol. 15

No. 6

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Key: a - asked price
b - bid price
n - nominal quotation

The open contract figures shown in this publication are the aggregates of positions long (or short) carried on the books of clearing members.

Table 1. WHEAT: Volume of trading, all futures combined, by markets
December 1948

Date	Chicago Board of Trade	Minneapolis Grain Exchange	Kansas City Board of Trade	Other contract markets	Total
1948	1,000	1,000	1,000	1,000	1,000
December	bushels	bushels	bushels	bushels	bushels
1	10,191	1,454	1,896	464	14,005
2	10,366	942	3,678	358	15,344
3	8,948	1,123	2,151	361	12,583
4	6,726	790	2,165	277	9,958
Sunday					
6	8,117	981	2,147	395	11,640
7	10,317	1,104	3,220	427	15,068
8	9,188	1,016	2,825	694	13,723
9	7,802	1,062	1,708	548	11,120
10	10,978	819	2,732	645	15,174
11	13,616	830	2,849	456	17,751
Sunday					
13	12,657	1,524	2,941	514	17,636
14	11,527	1,933	2,809	460	16,729
15	7,764	1,184	1,963	494	11,405
16	12,265	1,324	2,479	597	16,665
17	10,413	730	1,795	388	13,326
18	9,842	652	1,734	326	12,554
Sunday					
20	9,719	814	1,691	352	12,576
21	14,215	970	3,741	634	19,560
22	12,641	1,282	2,041	448	16,412
23	6,113	557	1,233	457	8,360
24	3,807	361	777	261	5,206
Holiday					
Sunday					
27	4,900	928	1,023	339	7,190
28	8,016	1,060	2,113	408	11,597
29	5,987	1,212	1,536	439	9,174
30	5,656	820	1,512	455	8,443
31	9,407	1,152	2,657	316	13,532
Total					
December 1948	241,178	26,624	57,416	11,513	336,731
November 1948	238,419	42,570	58,630	8,140	347,759
December 1947	320,206	28,457	60,304	15,004	423,971

Table 2. WHEAT: Volume of trading, Chicago Board of Trade
December 1948

Date	Future				All futures
	December	May	July	September	
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
1948					
December					
1	3,074	5,348	1,469	300	10,191
2	2,555	5,862	1,667	282	10,366
3	2,130	5,480	1,151	187	8,948
4	1,660	3,549	1,233	284	6,726
Sunday					
6	2,197	4,485	1,230	205	8,117
7	2,853	6,275	988	201	10,317
8	1,712	5,491	1,671	314	9,188
9	1,308	4,715	1,437	342	7,802
10	1,838	5,557	2,906	677	10,978
11	2,057	7,555	3,294	710	13,616
Sunday					
13	2,169	7,028	2,775	685	12,657
14	1,761	6,137	3,115	514	11,527
15	1,891	4,120	1,513	240	7,764
16	2,974	6,328	2,442	521	12,265
17	2,465	5,265	2,216	467	10,413
18	2,143	4,557	2,579	563	9,842
Sunday					
20	2,627	4,731	1,940	421	9,719
21	4,384	6,283	3,082	466	14,215
22	5,240	5,637	1,479	285	12,641
23	---	3,805	1,957	351	6,113
24	---	2,101	1,272	434	3,807
Holiday					
Sunday					
27	---	3,098	1,635	167	4,900
28	---	5,035	2,309	672	8,016
29	---	4,193	1,395	399	5,987
30	---	3,971	1,167	518	5,656
31	---	6,208	2,537	662	9,407
Total					
December 1948	47,038	132,814	50,459	10,867	241,178
November 1948	80,665	110,566	40,711	6,477	238,419
December 1947	37,961	184,253	78,318	17,981	<u>1</u> /320,206

1/ Includes 1193 March and 500 (1948) December future.

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY

RESEARCH REPORT

NO. 100

1950

BY

DR. J. H. DILLON

AND

DR. R. M. HARRIS

CHICAGO, ILL.

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Table 3. WHEAT: Open contracts, all futures combined, by markets
December 1948

Date	: Chicago : Board of : Trade	: Minneapolis : Grain : Exchange	: Kansas City : Board of : Trade	: Other : contract : markets	: Total
1948	1,000	1,000	1,000	1,000	1,000
December	bushels	bushels	bushels	bushels	bushels
1	61,438	10,131	23,647	588	95,804
2	60,917	10,090	23,337	625	94,969
3	61,041	10,048	23,080	602	94,771
4	60,646	9,932	23,387	596	94,561
Sunday					
6	60,310	9,927	23,494	660	94,391
7	59,475	9,814	23,284	672	93,245
8	59,486	9,729	23,440	784	93,439
9	59,620	9,571	23,502	767	93,460
10	59,652	9,566	24,064	733	94,015
11	60,214	9,680	23,869	718	94,481
Sunday					
13	59,091	9,629	23,889	767	93,376
14	59,565	9,938	24,071	761	94,335
15	59,697	9,996	23,775	822	94,290
16	59,388	9,868	23,448	796	93,500
17	59,094	9,742	23,401	775	93,012
18	58,191	9,755	23,182	776	91,904
Sunday					
20	56,739	9,656	22,910	806	90,111
21	55,617	9,566	22,289	752	88,224
22	53,359	9,429	22,230	765	85,783
23	53,212	9,385	22,022	746	85,365
24	52,868	9,423	21,915	767	84,973
Holiday					
Sunday					
27	53,368	9,403	21,922	758	85,451
28	54,639	9,239	22,379	819	87,076
29	54,299	8,639	22,360	822	86,120
30	54,262	8,683	22,526	851	86,322
31	54,369	8,554	22,504	915	86,342

Table 4. WHEAT: Open contracts, Chicago Board of Trade
December 1948

Date	Future				All futures
	December	May	July	September	
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
1948					
December					
1	18,362	32,172	9,309	1,595	61,438
2	17,743	32,084	9,456	1,634	60,917
3	17,104	32,762	9,489	1,686	61,041
4	16,430	32,943	9,559	1,714	60,646
Sunday					
6	15,589	33,285	9,722	1,714	60,310
7	14,455	33,698	9,557	1,765	59,475
8	14,007	34,313	9,411	1,755	59,486
9	13,663	34,475	9,692	1,790	59,620
10	13,196	34,299	10,250	1,907	59,652
11	12,615	35,323	10,241	2,035	60,214
Sunday					
13	12,108	34,703	10,164	2,116	59,091
14	11,442	35,301	10,690	2,132	59,565
15	10,833	35,899	10,798	2,167	59,697
16	9,252	36,643	11,282	2,211	59,388
17	7,962	37,132	11,702	2,298	59,094
18	6,544	37,091	12,251	2,305	58,191
Sunday					
20	5,385	36,366	12,626	2,362	56,739
21	3,379	36,124	13,644	2,470	55,617
22	795	36,135	13,857	2,572	53,359
23	670	36,016	13,974	2,552	53,212
24	309	35,914	14,044	2,601	52,868
Holiday					
Sunday					
27	282	36,271	14,168	2,647	53,368
28	281	36,840	14,758	2,760	54,639
29	178	36,393	14,815	2,913	54,299
30	147	36,194	14,958	2,963	54,262
31	---	36,589	14,786	2,994	54,369

Table 5. WHEAT: Daily closing prices at Chicago, Minneapolis and Kansas City
December 1948

1949 May future			
Date	Chicago Board of Trade	Minneapolis Grain Exchange	Kansas City Board of Trade
1948 December	Cents	Cents	Cents
1	230 7/8-31 1/8	225 1/8	220 1/4
2	231 1/8-1/4	225 5/8	220 7/8
3	232 1/4-3/8	226 5/8	221 5/8
4	232 1/2	227 1/4	222
Sunday			
6	231 7/8-32	226 3/4	221 1/4
7	230 1/2-5/8	225	219 3/4-7/8
8	230 3/4-31	225 7/8	220 3/8
9	230 3/8-1/2	225	219 7/8
10	230 1/8-1/4	224 3/4	219 7/8
11	227 3/8-1/2	222 1/8 a	216 7/8
Sunday			
13	227 7/8-28	221 5/8-3/4	217 1/4
14	228 1/4-3/8	222 3/8 b	217 5/8
15	227 3/8-1/2	221 3/4 a	217 1/8
16	225 5/8-3/4	220 3/8	215 1/2
17	225 3/4-7/8	220 3/8	215 1/2
18	224 7/8	219 1/4 b	214
Sunday			
20	225 1/4-1/2	219 3/8	214 1/2
21	227 1/8-3/8	221 1/2 b	216 1/2
22	226 7/8-27 1/8	221 5/8	216 3/8
23	228 1/8-1/4	222 5/8	217 1/2
24	227 7/8-28	222 b	217 1/2-5/8
Holiday			
Sunday			
27	227 5/8	222	217 1/8
28	228 3/8-1/2	222 5/8 a	217 5/8
29	228 5/8-3/4	222 7/8	217 7/8
30	228-28 1/8	221 7/8	217-17 1/8
31	226 1/8-1/4	219 1/2	214 7/8

Table 6. WHEAT: High, low and closing prices, three principal futures, Chicago Board of Trade, December 1948

Date	1949 May future			1949 July future			1949 September future		
	:High	Low	Closing	:High	Low	Closing	:High	Low	Closing
1948									
December	:Cents	Cents	Cents	:Cents	Cents	Cents	:Cents	Cents	Cents
1	:231 1/8	229 1/8	230 7/8-31 1/8	:212 3/4	210 7/8	212 5/8-3/4	:211 1/4	209 3/8	211 1/4
2	:232 1/8	230 7/8	231 1/8-1/4	:213 3/4	212	212-12 1/8	:212 1/2	210 3/4	210 7/8
3	:232 3/4	231 3/8	232 1/4-3/8	:213 5/8	212 1/8	213 3/8	:212 1/8	210 7/8	212
4	:233 3/8	232	232 1/2	:214 1/2	213 1/2	214 3/8	:213	212 1/4	212 7/8
Sunday									
6	:233 1/8	231 7/8	231 7/8-32	:215 1/8	214 3/8	214 3/8-1/2	:213 5/8	213	213 1/4
7	:232 1/4	230 3/8	230 1/2-5/8	:214 5/8	213 1/8	213 3/8-1/2	:213 1/4	211 7/8	212
8	:231 1/2	230 1/8	230 3/4-31	:215	213	214 3/4-7/8	:213 3/4	211 5/8	213 1/2
9	:231 5/8	230 1/4	230 3/8-1/2	:215 1/8	213 1/2	213 1/2	:214	212 3/8	212 3/8
10	:231 1/8	229 3/4	230 1/8-1/4	:213 3/8	211 7/8	212 1/8-1/4	:212 1/8	210 5/8	211
11	:229 5/8	227 3/8	227 3/8-1/2	:211 3/4	208 7/8	208 7/8-09	:211	207 1/2	207 1/2
Sunday									
13	:228	225 3/4	227 7/8-28	:209 5/8	206 1/4	209 1/2-5/8	:208 1/4	205 1/4	208 1/8-1/4
14	:228 3/4	227 1/4	228 1/4-3/8	:210	208 1/8	208 7/8-09	:208 3/4	207 1/8	208 1/2
15	:228 5/8	227 1/4	227 3/8-1/2	:209 3/8	208 1/4	208 3/8-1/2	:208 3/4	207 1/2	207 7/8
16	:227 3/8	225 1/2	225 5/8-3/4	:208 1/4	207	207-07 1/8	:208	206 3/4	207
17	:226 3/4	225 3/8	225 3/4-7/8	:208 1/4	206 3/8	207	:208 1/8	206 7/8	207 1/2
18	:226 1/8	224 1/4	224 7/8	:206 7/8	205 1/8	205 3/8-1/2	:207 1/4	205 3/8	205 3/4-06
Sunday									
20	:225 3/4	224 1/2	225 1/4-1/2	:206 3/4	205	206 3/8-1/2	:207	205 1/8	206 5/8-3/4
21	:227 1/2	225 1/2	227 1/8-3/8	:208 3/8	206 3/4	208 1/4-3/8	:208 1/4	206 3/8	208 1/4
22	:228	226 1/2	226 7/8-27 1/8	:208 3/4	207 3/8	207 7/8-08	:208 5/8	207 1/4	207 3/4-7/8
23	:228 5/8	226 3/4	228 1/8-1/4	:210 1/4	207 7/8	209 3/4-10	:210	208	209 7/8
24	:228 7/8	227 3/8	227 7/8-28	:211	209 1/4	210 3/4	:210 7/8	209 3/8	210 3/8-5/8
Holiday:									
Sunday									
27	:228 3/8	227 1/8	227 5/8	:211 3/8	210 3/8	210 3/4-7/8	:211 1/8	210 1/4	210 5/8-3/4
28	:228 5/8	227 5/8	228 3/8-1/2	:210 3/4	209 3/8	210 3/8-1/2	:211	209	210
29	:229 3/8	227 3/4	228 5/8-3/4	:210 5/8	209 7/8	210 1/4-3/8	:210 1/2	209 3/8	209 3/4
30	:229	228	228-28 1/8	:210 7/8	209 3/4	209 3/4-7/8	:210 3/4	210	210 1/8
31	:228 1/4	226 1/8	226 1/8-1/4	:209 7/8	208	208 3/8-1/2	:210	208 1/8	208 1/8

Table 7. CORN: Volume of trading, all futures combined, by markets
December 1948

Date	: Chicago : Board of : Trade	: Kansas City : Board of : Trade	: Other : contract : markets	: Total
1948	1,000	1,000	1,000	1,000
<u>December</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>
1	20,777	25	469	21,271
2	17,004	5	463	17,472
3	18,693	40	427	19,160
4	12,842	65	359	13,266
Sunday				
6	14,383	70	344	14,797
7	14,639	20	455	15,114
8	12,630	15	283	12,928
9	12,448	---	390	12,838
10	12,628	20	320	12,968
11	14,372	40	420	14,832
Sunday				
13	15,256	25	424	15,705
14	11,870	5	328	12,203
15	9,493	5	400	9,898
16	8,060	20	367	8,447
17	11,916	10	355	12,281
18	7,440	---	361	7,801
Sunday				
20	8,201	---	241	8,442
21	8,427	---	230	8,657
22	8,631	10	179	8,820
23	7,072	15	239	7,326
24	6,267	---	108	6,375
Holiday				
Sunday				
27	5,280	15	183	5,478
28	7,514	10	254	7,778
29	10,900	30	351	11,281
30	6,776	---	263	7,039
31	8,333	15	161	8,509
Total				
December 1948	291,852	460	8,374	300,686
November 1948	369,401	411	10,798	380,610
December 1947	270,524	432	10,927	281,883

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Table 8. CORN: Volume of trading, Chicago Board of Trade
December 1948

	Future					
					1949	All
Date	December	May	July	September	December	futures
1948	1,000	1,000	1,000	1,000	1,000	1,000
<u>December</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>
1	7,168	10,120	2,935	554		20,777
2	5,496	8,739	2,344	425		17,004
3	5,449	9,932	2,373	939		18,693
4	4,123	6,262	1,904	553		12,842
Sunday						
6	3,895	7,688	2,340	460		14,383
7	3,725	8,139	2,012	763		14,639
8	3,079	7,182	1,880	489		12,630
9	2,737	7,254	1,934	523		12,448
10	2,534	7,643	1,704	747		12,628
11	2,363	8,891	2,371	747		14,372
Sunday						
13	1,677	9,656	2,991	932		15,256
14	1,227	8,015	2,090	538		11,870
15	813	6,496	1,710	472		9,493
16	537	5,579	1,592	352		8,060
17	1,433	7,899	2,311	273		11,916
18	1,034	4,408	1,526	472		7,440
Sunday						
20	1,106	5,108	1,396	591		8,201
21	1,378	5,593	1,256	200		8,427
22	2,695	4,631	1,061	244		8,631
23	---	5,281	1,611	180		7,072
24	---	4,674	1,403	190		6,267
Holiday						
Sunday						
27	---	3,678	1,288	260	54	5,280
28	---	6,338	998	111	67	7,514
29	---	8,228	2,211	347	114	10,900
30	---	5,140	1,268	320	48	6,776
31	---	4,983	2,247	1,046	57	8,333
Total						
December 1948	52,469	177,559	48,756	12,728	340	291,852
November 1948	194,744	118,288	49,305	7,064	---	369,401
December 1947	52,611	148,463	50,309	17,848	1,293	270,524

THE UNIVERSITY OF CHICAGO
 DEPARTMENT OF CHEMISTRY
 LABORATORY OF PHYSICAL CHEMISTRY
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25. Glossary	25.1. List of glossary	26. Bibliography	27. Index
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27. Index	27.1. List of index	28. Appendix	29. Glossary
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	28.2. Discussion of the appendix		
29. Glossary	29.1. List of glossary	30. Bibliography	31. Index
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30. Bibliography	30.1. List of bibliography	31. Index	32. Appendix
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35. Index	35.1. List of index	36. Appendix	37. Glossary
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50. Bibliography	50.1. List of bibliography	51. Index	52. Appendix
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66. Bibliography	66.1. List of bibliography	67. Index	68. Appendix
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68. Appendix	68.1. List of appendix	69. Glossary	70. Bibliography
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69. Glossary	69.1. List of glossary	70. Bibliography	71. Index
	69.2. Discussion of the glossary		
70. Bibliography	70.1. List of bibliography	71. Index	72. Appendix
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71. Index	71.1. List of index	72. Appendix	73. Glossary
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72. Appendix	72.1. List of appendix	73. Glossary	74. Bibliography
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Table 9. CORN: Open contracts, all futures combined, by markets
December 1948

Date	: Chicago : Board of : Trade	: Kansas City : Board of : Trade	: Other : contract : markets	: Total
1948	1,000	1,000	1,000	1,000
December	bushels	bushels	bushels	bushels
1	78,197	210	797	79,204
2	77,715	185	815	78,715
3	78,582	165	809	79,556
4	78,668	225	794	79,687
Sunday				
6	78,818	285	796	79,899
7	79,684	295	704	80,683
8	80,717	300	709	81,726
9	79,346	300	707	80,353
10	79,729	305	713	80,747
11	79,778	300	695	80,773
Sunday				
13	79,715	310	686	80,711
14	80,318	310	699	81,327
15	80,633	315	722	81,670
16	81,067	305	697	82,069
17	82,315	290	713	83,318
18	82,411	265	675	83,371
Sunday				
20	82,361	265	680	83,326
21	82,516	285	681	83,482
22	82,474	280	673	83,427
23	82,369	295	648	83,312
24	82,235	295	663	83,193
Holiday				
Sunday				
27	82,406	300	637	83,343
28	81,934	295	631	82,860
29	81,426	290	652	82,368
30	81,182	290	609	82,081
31	80,931	280	625	81,836

Table 10. CORN: Open contracts, Chicago Board of Trade
December 1948

Date	Future						All futures
	December	May	July	September	December	1949	
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	
1948							
December							
1	13,661	40,123	21,972	2,441			78,197
2	11,830	40,947	22,267	2,671			77,715
3	10,723	41,991	22,750	3,118			78,582
4	8,972	42,730	23,535	3,431			78,668
Sunday							
6	8,426	42,954	24,084	3,354			78,818
7	7,583	43,889	24,888	3,324			79,684
8	7,203	44,989	25,212	3,313			80,717
9	6,290	44,419	25,256	3,381			79,346
10	5,753	44,892	25,575	3,509			79,729
11	5,063	45,276	25,742	3,697			79,778
Sunday							
13	4,496	45,583	25,775	3,861			79,715
14	4,080	46,313	25,955	3,970			80,318
15	3,713	46,868	26,065	3,987			80,633
16	3,592	47,296	26,257	3,922			81,067
17	3,189	48,145	26,914	4,067			82,315
18	2,546	48,550	27,078	4,237			82,411
Sunday							
20	2,257	48,810	27,050	4,244			82,361
21	1,632	49,439	27,156	4,289			82,516
22	844	49,982	27,341	4,307			82,474
23	315	50,186	27,553	4,315			82,369
24	9	50,048	27,825	4,353			82,235
Holiday							
Sunday							
27	9	50,024	27,882	4,454	37		82,406
28	9	49,398	27,959	4,487	81		81,934
29	5	48,656	28,079	4,549	137		81,426
30	---	48,375	28,044	4,600	163		81,182
31	---	48,435	27,677	4,627	192		80,931

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619	620	621	622	623	624
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721	722	723	724	725	726
727	728	729	730	731	732
733	734	735	736	737	738
739	740	741	742	743	744
745	746	747	748	749	750
751	752	753	754	755	756
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763	764	765	766	767	768
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775	776	777	778	779	780
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787	788	789	790	791	792
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799	800	801	802	803	804
805	806	807	808	809	810
811	812	813	814	815	816
817	818	819	820	821	822
823	824	825	826	827	828
829	830	831	832	833	834
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841	842	843	844	845	846
847	848	849	850	851	852
853	854	855	856	857	858
859	860	861	862	863	864
865	866	867	868	869	870
871	872	873	874	875	876
877	878	879	880	881	882
883	884	885	886	887	888
889	890	891	892	893	894
895	896	897	898	899	900
901	902	903	904	905	906
907	908	909	910	911	912
913	914	915	916	917	918
919	920	921	922	923	924
925	926	927	928	929	930
931	932	933	934	935	936
937	938	939	940	941	942
943	944	945	946	947	948
949	950	951	952	953	954
955	956	957	958	959	960
961	962	963	964	965	966
967	968	969	970	971	972
973	974	975	976	977	978
979	980	981	982	983	984
985	986	987	988	989	990
991	992	993	994	995	996
997	998	999	1000	1001	1002

Table 11. CORN: Daily closing prices at Chicago and Kansas City
December 1948

		1949 May future	
Date		Chicago	Kansas City
		Board of	Board of
		Trade	Trade
1948			
<u>December</u>	<u>Cents</u>	<u>Cents</u>	
1	149 1/4-1/2	142 1/8	
2	149 1/8-1/4	142 7/8	
3	149 3/4-7/8	144 1/4	
4	149 5/8-3/4	143 3/4	
Sunday			
6	150 3/8-1/2	144 3/8	
7	149 3/4-7/8	143 7/8	
8	150-50 1/8	144 1/4	
9	149 1/4-3/8	143 3/8	
10	148 1/2-5/8	142 3/4	
11	146 1/2	140 7/8	
Sunday			
13	148-48 1/4	142	
14	148 3/8-1/2	142 3/8	
15	146 1/2-5/8	141	
16	146 3/4-7/8	141	
17	147 1/2-5/8	141 3/4	
18	146 1/2-5/8	140 7/8	
Sunday			
20	146 1/8-1/4	140 3/4	
21	147-47 1/8	141	
22	146 3/4-7/8	141	
23	147 7/8-48	141 7/8	
24	148 5/8-3/4	142 5/8	
Holiday			
Sunday			
27	148 3/8-1/2	142 1/2	
28	149 1/8-1/4	143 1/8	
29	149 5/8-3/4	143 7/8	
30	149 1/2-5/8	143 3/4	
31	148 3/8-1/2	142 3/4	

Table 12. CORN: High, low and closing prices, three principal futures, Chicago Board of Trade, December 1948

Date	1949 May future				1949 July future				1949 September future			
	:High	Low	Closing	:High	:Cents	Low	Closing	:High	:Cents	Low	Closing	:Cents
1948												
December												
1	:149 1/2	147 5/8	149 1/4-1/2	:148 5/8	146 7/8		148 1/4-1/2	:143 3/8	141 3/4		143 1/4	
2	:150 3/8	149	149 1/8-1/4	:149 1/4	147 7/8		147 7/8-48	:143 7/8	142 1/4		142 1/4-3/8	
3	:150 5/8	149 1/8	149 3/4-7/8	:149	147 7/8		148 1/8-1/4	:142 7/8	141 3/4		142	
4	:150 1/8	149 1/8	149 5/8-3/4	:148 5/8	147 1/2		148	:142 1/2	141 5/8		142-42 1/4	
Sunday												
6	:151	149 7/8	150 3/8-1/2	:149 1/2	148 3/8		149-49 1/8	:143 7/8	142 5/8		143 1/4-1/2	
7	:151	149 1/2	149 3/4-7/8	:149 1/2	148 1/8		148 1/4-3/8	:144	143		143-43 1/8	
8	:150 1/4	149 1/4	150-50 1/8	:149	147 7/8		148 3/4-7/8	:144 5/8	143		144-44 1/8	
9	:150 3/8	149 1/4	149 1/4-3/8	:149 3/8	148		148-48 1/8	:144 3/4	143 1/4		143 1/4-3/8	
10	:149 1/8	148 1/8	148 1/2-5/8	:148	147 1/8		147 1/2-5/8	:143 1/4	142 1/2		142 5/8-3/4	
11	:148 1/4	146 1/2	146 1/2	:147 3/8	145 3/4		145 3/4	:142 5/8	141 1/8		141 1/8-1/4	
Sunday												
13	:148 1/4	145 7/8	148-48 1/4	:146 3/4	145		146 5/8	:142 1/8	140 1/4		141 5/8-3/4	
14	:148 3/4	147 1/2	148 3/8-1/2	:147 1/2	146 3/8		147 3/8-1/2	:142 1/8	140 1/2		141 1/2	
15	:148 1/2	146 1/2	146 1/2-5/8	:147 5/8	145 3/4		146	:141 3/4	140 1/2		140 1/2	
16	:147 3/8	146 3/8	146 3/4-7/8	:146 1/2	145 5/8		146-46 1/8	:141	140 1/8		140 5/8	
17	:148 1/4	146 3/4	147 1/2-5/8	:147	146		146 1/4	:141 3/8	140 3/8		140 3/8	
18	:147 1/2	146 1/4	146 1/2-5/8	:146 1/4	145		145 3/8-1/2	:140 1/2	139 3/4		139 7/8-40	
Sunday												
20	:147 1/4	146 1/8	146 1/8-1/4	:146 1/8	145		145-45 1/8	:140 1/4	139 3/4		139 3/4-7/8	
21	:147 1/8	146 3/8	147-47 1/8	:145 3/4	145		145 5/8-3/4	:140 1/2	139 7/8		140 3/8	
22	:147 3/8	146 1/4	146 3/4-7/8	:146	145 1/8		145 1/2-5/8	:140 5/8	139 7/8		140 1/4	
23	:148	146 3/4	147 7/8-48	:146 1/2	145 1/2		146 1/2	:141	140 3/8		140 7/8-41	
24	:148 7/8	147 7/8	148 5/8-3/4	:147 1/2	146 1/2		147 1/4-3/8	:141 7/8	141 1/4		141 7/8	
Holiday												
Sunday												
27	:149	148	148 3/8-1/2	:147 1/2	146 5/8		147-47 1/4	:142 1/8	141 1/8		141 1/2	
28	:149 1/4	148 1/8	149 1/8-1/4	:147 1/2	146 5/8		147 3/8	:141 7/8	141 1/8		141 3/4	
29	:150 1/8	148 7/8	149 5/8-3/4	:147 3/4	146 3/4		147 1/2-5/8	:141 7/8	140 7/8		141 3/8-1/2	
30	:150 1/8	149 1/2	149 1/2-5/8	:147 7/8	147 1/8		147 1/8-1/4	:141 7/8	141		141-41 1/8	
31	:149 1/4	148 1/4	148 3/8-1/2	:147	146 1/4		146 1/4-3/8	:140 3/4	139 7/8		139 7/8	

Table 13. OATS: Volume of trading, all futures combined, by markets
December 1948

Date	: Chicago : Board of : Trade	: Minneapolis : Grain : Exchange	: Other : contract : markets	: Total
1948	1,000	1,000	1,000	1,000
December	bushels	bushels	bushels	bushels
1	3,459	612	61	4,132
2	3,013	850	23	3,886
3	2,054	474	45	2,573
4	1,614	590	31	2,235
Sunday				
6	1,506	795	7	2,308
7	2,704	580	37	3,321
8	1,430	541	40	2,011
9	2,123	387	8	2,518
10	4,213	765	80	5,058
11	3,026	549	38	3,613
Sunday				
13	2,944	573	41	3,558
14	2,907	550	32	3,489
15	2,343	335	66	2,744
16	1,492	602	18	2,112
17	2,317	296	25	2,638
18	2,499	316	183	2,998
Sunday				
20	2,650	541	12	3,203
21	2,598	311	39	2,948
22	5,228	543	42	5,813
23	2,563	300	40	2,903
24	1,144	171	29	1,344
Holiday				
Sunday				
27	1,078	280	15	1,373
28	1,696	348	75	2,119
29	1,025	392	25	1,442
30	1,969	327	80	2,376
31	1,409	502	34	1,945
Total				
December 1948	61,004	12,530	1,126	74,660
November 1948	82,306	17,127	1,289	100,722
December 1947	152,947	15,755	1,968	170,670

Table 14. OATS: Volume of trading, Chicago Board of Trade
December 1948

Date	Future				All futures
	December	May	July	September	
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
1948					
December					
1	1,132	2,035	270	22	3,459
2	997	1,890	97	29	3,013
3	612	1,329	111	2	2,054
4	430	1,080	99	5	1,614
Sunday					
6	287	1,108	89	22	1,506
7	1,116	1,464	102	22	2,704
8	513	731	146	40	1,430
9	741	1,297	63	22	2,123
10	641	3,068	362	142	4,213
11	652	2,102	245	27	3,026
Sunday					
13	554	2,158	131	101	2,944
14	923	1,847	137	---	2,907
15	457	1,680	186	20	2,343
16	653	781	46	12	1,492
17	1,019	1,207	91	---	2,317
18	787	1,634	73	5	2,499
Sunday					
20	978	1,458	190	24	2,650
21	1,160	1,314	89	35	2,598
22	3,276	1,701	224	27	5,228
23	---	2,057	413	93	2,563
24	---	972	155	17	1,144
Holiday					
Sunday					
27	---	946	115	17	1,078
28	---	1,594	102	---	1,696
29	---	868	118	39	1,025
30	---	1,730	189	50	1,969
31	---	1,256	136	17	1,409
Total					
December 1948	16,928	39,307	3,979	790	61,004
November 1948	33,823	40,263	7,163	1,057	82,306
December 1947	23,396	88,151	31,049	9,851	<u>1/152,947</u>

1/ Includes 54 March and 446 (1948) December future.

ORIGINAL ARTICLES					
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
55	56	57	58	59	60
61	62	63	64	65	66
67	68	69	70	71	72
73	74	75	76	77	78
79	80	81	82	83	84
85	86	87	88	89	90
91	92	93	94	95	96
97	98	99	100	101	102
103	104	105	106	107	108
109	110	111	112	113	114
115	116	117	118	119	120
121	122	123	124	125	126
127	128	129	130	131	132
133	134	135	136	137	138
139	140	141	142	143	144
145	146	147	148	149	150
151	152	153	154	155	156
157	158	159	160	161	162
163	164	165	166	167	168
169	170	171	172	173	174
175	176	177	178	179	180
181	182	183	184	185	186
187	188	189	190	191	192
193	194	195	196	197	198
199	200	201	202	203	204
205	206	207	208	209	210
211	212	213	214	215	216
217	218	219	220	221	222
223	224	225	226	227	228
229	230	231	232	233	234
235	236	237	238	239	240
241	242	243	244	245	246
247	248	249	250	251	252
253	254	255	256	257	258
259	260	261	262	263	264
265	266	267	268	269	270
271	272	273	274	275	276
277	278	279	280	281	282
283	284	285	286	287	288
289	290	291	292	293	294
295	296	297	298	299	300
301	302	303	304	305	306
307	308	309	310	311	312
313	314	315	316	317	318
319	320	321	322	323	324
325	326	327	328	329	330
331	332	333	334	335	336
337	338	339	340	341	342
343	344	345	346	347	348
349	350	351	352	353	354
355	356	357	358	359	360
361	362	363	364	365	366
367	368	369	370	371	372
373	374	375	376	377	378
379	380	381	382	383	384
385	386	387	388	389	390
391	392	393	394	395	396
397	398	399	400	401	402
403	404	405	406	407	408
409	410	411	412	413	414
415	416	417	418	419	420
421	422	423	424	425	426
427	428	429	430	431	432
433	434	435	436	437	438
439	440	441	442	443	444
445	446	447	448	449	450
451	452	453	454	455	456
457	458	459	460	461	462
463	464	465	466	467	468
469	470	471	472	473	474
475	476	477	478	479	480
481	482	483	484	485	486
487	488	489	490	491	492
493	494	495	496	497	498
499	500	501	502	503	504
505	506	507	508	509	510
511	512	513	514	515	516
517	518	519	520	521	522
523	524	525	526	527	528
529	530	531	532	533	534
535	536	537	538	539	540
541	542	543	544	545	546
547	548	549	550	551	552
553	554	555	556	557	558
559	560	561	562	563	564
565	566	567	568	569	570
571	572	573	574	575	576
577	578	579	580	581	582
583	584	585	586	587	588
589	590	591	592	593	594
595	596	597	598	599	600
601	602	603	604	605	606
607	608	609	610	611	612
613	614	615	616	617	618
619	620	621	622	623	624
625	626	627	628	629	630
631	632	633	634	635	636
637	638	639	640	641	642
643	644	645	646	647	648
649	650	651	652	653	654
655	656	657	658	659	660
661	662	663	664	665	666
667	668	669	670	671	672
673	674	675	676	677	678
679	680	681	682	683	684
685	686	687	688	689	690
691	692	693	694	695	696
697	698	699	700	701	702
703	704	705	706	707	708
709	710	711	712	713	714
715	716	717	718	719	720
721	722	723	724	725	726
727	728	729	730	731	732
733	734	735	736	737	738
739	740	741	742	743	744
745	746	747	748	749	750
751	752	753	754	755	756
757	758	759	760	761	762
763	764	765	766	767	768
769	770	771	772	773	774
775	776	777	778	779	780
781	782	783	784	785	786
787	788	789	790	791	792
793	794	795	796	797	798
799	800	801	802	803	804
805	806	807	808	809	810
811	812	813	814	815	816
817	818	819	820	821	822
823	824	825	826	827	828
829	830	831	832	833	834
835	836	837	838	839	840
841	842	843	844	845	846
847	848	849	850	851	852
853	854	855	856	857	858
859	860	861	862	863	864
865	866	867	868	869	870
871	872	873	874	875	876
877	878	879	880	881	882
883	884	885	886	887	888
889	890	891	892	893	894
895	896	897	898	899	900
901	902	903	904	905	906
907	908	909	910	911	912
913	914	915	916	917	918
919	920	921	922	923	924
925	926	927	928	929	930
931	932	933	934	935	936
937	938	939	940	941	942
943	944	945	946	947	948
949	950	951	952	953	954
955	956	957	958	959	960
961	962	963	964	965	966
967	968	969	970	971	972
973	974	975	976	977	978
979	980	981	982	983	984
985	986	987	988	989	990
991	992	993	994	995	996
997	998	999	1000	1001	1002

Table 15. OATS: Open contracts, all futures combined, by markets
December 1948

Date	: Chicago : Board of : Trade	: Minneapolis : Grain : Exchange	: Other : contract : markets	: : :	Total
1948	1,000	1,000	1,000		1,000
December	bushels	bushels	bushels		bushels
1	28,126	4,305	417		32,908
2	28,435	4,352	432		33,219
3	28,324	4,496	458		33,278
4	28,365	4,624	473		33,462
Sunday					
6	28,522	4,745	468		33,735
7	28,320	4,739	462		33,521
8	28,144	4,690	455		33,289
9	28,099	4,702	451		33,252
10	28,018	4,632	442		33,092
11	27,623	4,609	439		32,671
Sunday					
13	27,360	4,561	449		32,370
14	27,655	4,529	462		32,646
15	27,536	4,559	456		32,551
16	27,269	4,598	468		32,335
17	27,362	4,597	469		32,428
18	27,150	4,627	477		32,254
Sunday					
20	26,616	4,673	481		31,770
21	26,033	4,647	467		31,147
22	24,327	4,516	450		29,293
23	24,723	4,533	475		29,731
24	24,789	4,513	492		29,794
Holiday					
Sunday					
27	24,944	4,584	492		30,020
28	24,633	4,205	520		29,358
29	24,431	3,950	519		28,900
30	23,954	3,860	487		28,301
31	23,731	3,350	491		28,072

Table 16. OATS: Open contracts, Chicago Board of Trade
December 1948

Date	Future				All futures
	December	May	July	September	
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
1948					
December					
1	5,334	18,458	3,940	454	28,186
2	5,160	18,860	3,954	461	28,435
3	4,946	18,965	3,950	463	28,324
4	4,813	19,103	3,981	468	28,365
Sunday					
6	4,774	19,282	3,995	471	28,522
7	4,527	19,338	3,977	478	28,320
8	4,435	19,239	3,982	488	28,144
9	4,329	19,344	3,948	478	28,099
10	4,172	19,412	3,984	450	28,018
11	4,018	19,195	3,972	438	27,623
Sunday					
13	3,874	19,056	3,961	469	27,360
14	3,987	19,213	3,986	469	27,655
15	3,833	19,216	4,008	479	27,536
16	3,482	19,298	4,010	479	27,269
17	3,363	19,483	4,037	479	27,362
18	3,222	19,408	4,041	479	27,150
Sunday					
20	2,655	19,469	4,013	479	26,616
21	2,178	19,360	4,026	469	26,033
22	295	19,493	4,058	481	24,327
23	291	19,715	4,191	526	24,723
24	281	19,784	4,183	541	24,789
Holiday					
Sunday					
27	281	19,910	4,195	558	24,944
28	179	19,711	4,185	558	24,633
29	107	19,560	4,196	568	24,431
30	55	19,173	4,163	563	23,954
31	---	19,023	4,142	566	23,731

Table 17. OATS: Daily closing prices, Chicago, Minneapolis and Winnipeg
and rate of exchange, Canadian currency
December 1948

Date	1949 May future			Canadian currency	
	Chicago	Minneapolis	Winnipeg	Closing quotation 2/	
1948					
December	Cents	Cents	Cents 1/	Percent	
1	78 3/4-7/8	73 3/4	71 1/2	7 11/16	Discount
2	79-79 1/8	73 3/4	72 1/8 b	7 7/16	"
3	79-79 1/8	73 3/4	72 1/8-1/4	7 7/16	"
4	78 7/8-79	73 3/4 a	72 1/4 b	7 7/16	"
Sunday					
6	79 1/8	74	72 5/8	7 5/8	"
7	78 3/8-1/2	73 1/4 a	71 1/2	7 13/16	"
8	79	74 1/8	71 5/8 b	7 3/4	"
9	78 1/4 b	73 3/8	71 1/4 b	7 11/16	"
10	77 1/8-1/4	72 1/4	70 7/8 b	7 5/8	"
11	76 1/8-1/4	71 3/8	70 3/8	7 5/8	"
Sunday					
13	76 1/4-3/8	71 3/4	70 b	7 1/2	"
14	77-77 1/8	72 5/8	70 3/4	7 7/16	"
15	76 5/8-3/4	72	70 1/2	7 7/16	"
16	76 1/2	72	70 1/4	7 3/8	"
17	77-77 1/8	72 3/4	70 3/4	7 1/2	"
18	76 3/8	72	69 7/8-70	7 1/2	"
Sunday					
20	76 1/4 b	71 3/4 b	69 3/8	7 5/8	"
21	77 a	72 1/2	69 3/4	7 15/16	"
22	76 7/8-77	72 7/8	70 1/4	7 15/16	"
23	78 1/4-3/8	73 5/8	70 3/4	7 15/16	"
24	78 3/4 a	73 5/8 b	70 3/4 a	7 15/16	"
Holiday					
Sunday					
27	78 3/4	73 7/8	Holiday	7 11/16	"
28	78 7/8 a	73 7/8	71 1/4	7 9/16	"
29	78 3/4-7/8	74 1/8	72 3/8 a	7 1/2	"
30	78 1/8-1/4	73 1/4	71 5/8 a	7 9/16	"
31	77 3/4-7/8	72 5/8 a	71 1/4 b	7 7/16	"

1/ Quotations converted into U. S. currency.

2/ Basis for converting closing prices on foreign markets into U. S. value.

NOTE: Canadian currency quotations furnished by a large Chicago bank.

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 DIVISION OF THE PHYSICAL SCIENCES
 DEPARTMENT OF CHEMISTRY

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 JANUARY 1965

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BY
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AND
 R. E. SMITH

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Table 18. OATS: High, low and closing prices, three principal futures, Chicago Board of Trade, December 1948

Date	1949 May future				1949 July future				1949 September future			
	: High	Low	Closing	: Cent s	: High	Low	Closing	: Cent s	: High	Low	Closing	: Cent s
1948												
December												
1	: 79	78 1/4	78 3/4-7/8	: 73 1/8	72 3/8	73 1/8	73 1/8	: 70 3/4	: 70 3/4	70 1/4	70 5/8 a	
2	: 79 5/8	78 7/8	79-79 1/8	: 73 3/4	73 1/8	73 1/4	73 1/4	: 71 1/4	: 71 1/4	70 3/4	70 7/8	
3	: 79 1/2	79	79-79 1/8	: 73 5/8	73 1/4	73 1/4	73 1/4	: ---	: ---	---	71 n	
4	: 79 1/2	78 3/4	78 7/8-79	: 73 5/8	72 7/8	73 1/8 b	73 1/8 b	: 71	: 71	70 7/8	70 7/8 a	
Sunday												
6	: 79 5/8	79	79 1/8	: 73 3/4	73 3/8	73 3/8	73 3/8 b	: 71 1/2	: 71 1/2	71 1/8 a	71 1/8 a	
7	: 79 3/8	78 3/8	78 3/8-1/2	: 73 3/8	73	73	73	: 71 1/8	: 71 1/8	70 3/4	71 1/8	
8	: 79	78 1/4	79	: 73 1/2	72 7/8	73 3/8	73 3/8	: 71 1/4 b	: 71 1/4 b	70 7/8	71 1/4 b	
9	: 79	78 1/4	78 1/4 b	: 73 3/8	72 7/8	73 a	73 a	: 71 1/8	: 71 1/8	70 7/8	71 a	
10	: 77 7/8	76 7/8	77 1/8-1/4	: 73 1/8	72	72 5/8	72 5/8	: 71	: 71	70	70 3/4	
11	: 77 1/8	76 1/8	76 1/8-1/4	: 72 3/8	71 7/8	71 7/8 a	71 7/8 a	: 70 3/8	: 70 3/8	70 1/8	70 1/8 a	
Sunday												
13	: 76 3/8	75 1/2	76 1/4-3/8	: 72	71	72 b	72 b	: 70	: 70	69	69 7/8	
14	: 77 1/8	76 1/2	77-77 1/8	: 72 5/8	72 1/4	72 1/2	72 1/2	: ---	: ---	---	70 1/4 b	
15	: 77 3/8	76 1/2	76 5/8-3/4	: 72 3/8	71 7/8	72	72	: 70 1/8	: 70 1/8	70 1/8	70 1/8	
16	: 76 7/8	76 3/8	76 1/2	: 71 7/8	71 5/8	71 3/4	71 3/4	: 70	: 70	69 7/8 a	69 7/8 b	
17	: 77 1/4	76 1/2	77-77 1/8	: 72 1/2	71 3/4	72 3/8	72 3/8	: ---	: ---	---	70 1/4 n	
18	: 77 1/4	76 1/8	76 3/8	: 72 1/4	71 1/2	71 3/4	71 3/4	: 70 1/8	: 70 1/8	69 5/8 a	69 5/8 a	
Sunday												
20	: 76 5/8	76	76 1/4 b	: 71 7/8	71 1/4	71 3/8 b	71 3/8 b	: 69 3/4	: 69 3/4	69 3/8 a	69 1/2	
21	: 77	76 3/8	77 a	: 72	71 1/2	72	72	: 69 7/8	: 69 7/8	69 5/8	69 7/8 a	
22	: 77 1/2	76 5/8	76 7/8-77	: 72 1/2	71 3/4	71 3/4 b	71 3/4 b	: 70 1/8	: 70 1/8	69 3/4	70	
23	: 78 3/8	77	78 1/4-3/8	: 73 3/8	72 1/2	73 1/4	73 1/4	: 71 1/4	: 71 1/4	70 1/4	71	
24	: 78 3/4	78 1/2	78 3/4 a	: 73 1/2	73 1/8	73 1/2 a	73 1/2 a	: 71 1/8	: 71 1/8	71	71	
Holiday												
Sunday												
27	: 79 1/8	78 1/2	78 3/4	: 73 1/2	73 1/8	73 1/2	73 1/2	: 70 7/8	: 70 7/8	70 3/4	70 3/4	
28	: 79	78 1/4	78 7/8 a	: 73 3/8	73	73 3/8	73 3/8	: ---	: ---	---	70 3/4 b	
29	: 79	78 5/8	78 3/4-7/8	: 73 1/2	73 1/4	73 3/8	73 3/8	: 70 7/8	: 70 7/8	70 5/8	70 5/8	
30	: 78 7/8	78	78 1/8-1/4	: 73 3/8	72 1/2	72 1/2 b	72 1/2 b	: 70 3/4	: 70 3/4	70	70	
31	: 78 3/8	77 5/8	77 3/4-7/8	: 73	72 1/8	73	73	: 70 1/2	: 70 1/2	69 7/8	70 1/2	

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Table 19. RYE: Volume of trading, all futures combined, by markets
December 1948

Date	: Chicago Board of Trade	: Minneapolis Grain Exchange	: Other contract markets	: Total
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
1948				
December				
1	350	154	4	508
2	538	72	2	612
3	200	38	---	238
4	329	165	---	494
Sunday				
6	639	169	5	813
7	487	208	---	695
8	315	68	5	388
9	332	118	2	452
10	383	211	3	597
11	292	41	8	341
Sunday				
13	299	120	4	423
14	251	61	1	313
15	132	118	---	250
16	466	106	---	572
17	87	51	1	139
18	243	146	---	391
Sunday				
20	189	38	---	227
21	485	83	---	568
22	290	135	---	425
23	77	30	2	109
24	100	41	1	142
Holiday				
Sunday				
27	68	54	---	122
28	141	47	---	188
29	91	51	---	142
30	146	62	1	209
31	119	90	---	209
Total				
December 1948	7,049	2,479	39	9,567
November 1948	6,173	3,590	148	9,911
December 1947	---	1,427	---	1,427

Table 20. RYE: Volume of trading, Chicago Board of Trade
December 1948

Date	Future		All futures
	December	May	
1948	1,000	1,000	1,000
<u>December</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>
1	133	217	350
2	233	305	538
3	59	141	200
4	76	253	329
Sundav			
6	251	388	639
7	234	253	487
8	54	261	315
9	90	242	332
10	27	356	383
11	97	195	292
Sunday			
13	19	280	299
14	55	196	251
15	40	92	132
16	123	343	466
17	35	52	87
18	68	175	243
Sunday			
20	85	104	189
21	220	265	485
22	162	128	290
23	---	77	77
24	---	100	100
Holiday			
Sunday			
27	---	68	68
28	---	141	141
29	---	91	91
30	---	146	146
31	---	119	119
Total			
December 1948	2,061	4,988	7,049
November 1948	2,836	3,337	6,173
December 1947	---	---	---

1. The first part of the document is a list of names and addresses, which are arranged in a columnar fashion. The names are written in a cursive script, and the addresses are written in a more formal, printed style. The list is organized into three columns, with the names in the first column, the addresses in the second column, and the names in the third column.

2. The second part of the document is a list of names and addresses, which are arranged in a columnar fashion. The names are written in a cursive script, and the addresses are written in a more formal, printed style. The list is organized into three columns, with the names in the first column, the addresses in the second column, and the names in the third column.

3. The third part of the document is a list of names and addresses, which are arranged in a columnar fashion. The names are written in a cursive script, and the addresses are written in a more formal, printed style. The list is organized into three columns, with the names in the first column, the addresses in the second column, and the names in the third column.

Table 21. RYE: Open contracts, all futures combined, by markets
December 1948

Date	: Chicago : Board of : Trade	: Minneapolis : Grain : Exchange	: Other : contract : markets	: : Total
1948	1,000	1,000	1,000	1,000
<u>December</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>
1	3,071	1,769	12	4,852
2	3,041	1,659	11	4,711
3	3,059	1,644	11	4,714
4	2,960	1,596	11	4,567
Sunday				
6	3,034	1,566	16	4,616
7	3,068	1,530	16	4,614
8	2,993	1,533	11	4,537
9	2,918	1,495	11	4,424
10	2,855	1,521	11	4,387
11	2,779	1,514	6	4,299
Sunday				
13	2,722	1,531	6	4,259
14	2,652	1,535	7	4,194
15	2,593	1,524	7	4,124
16	2,546	1,493	7	4,046
17	2,477	1,445	7	3,929
18	2,453	1,355	7	3,815
Sunday				
20	2,199	1,351	7	3,557
21	1,944	1,322	7	3,273
22	1,778	1,274	7	3,059
23	1,773	1,279	7	3,059
24	1,792	1,259	6	3,057
Holiday				
Sunday				
27	1,813	1,240	6	3,059
28	1,665	1,254	6	2,925
29	1,690	1,233	6	2,929
30	1,742	1,222	7	2,971
31	1,689	1,181	7	2,877

Table 22. RYE: Open contracts, Chicago Board of Trade
December 1948

Date	Future		All futures
	December	May	
1948	1,000	1,000	1,000
<u>December</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>
1	1,440	1,631	3,071
2	1,354	1,687	3,041
3	1,332	1,727	3,059
4	1,266	1,694	2,960
Sunday			
6	1,195	1,839	3,034
7	1,206	1,862	3,068
8	1,163	1,830	2,993
9	1,103	1,815	2,918
10	1,034	1,821	2,855
11	921	1,858	2,779
Sunday			
13	913	1,809	2,722
14	873	1,779	2,652
15	843	1,750	2,593
16	830	1,716	2,546
17	775	1,702	2,477
18	712	1,741	2,453
Sunday			
20	484	1,715	2,199
21	350	1,594	1,944
22	175	1,603	1,778
23	175	1,598	1,773
24	175	1,617	1,792
Holiday			
Sunday			
27	175	1,638	1,813
28	45	1,620	1,665
29	45	1,645	1,690
30	45	1,697	1,742
31	---	1,689	1,689

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

RESEARCH REPORT

1954

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Table 23. RYE: Daily closing prices at Chicago, Minneapolis and Winnipeg
December 1948

	:	1949 May future		:
Date	:	Chicago	:	Minneapolis
	:		:	Winnipeg 1/
	:		:	
1948				
<u>December</u>		<u>Cents</u>	<u>Cents</u>	<u>Cents</u>
1		177 b	165 1/2	151 1/8 a
2		176	166 1/8 a	151 3/4
3		177	167 b	152 3/4 b
4		178	168 a	154 3/4 a
Sunday				
6		178 1/2	168 7/8 a	154 1/2 b
7		176	166 1/4 a	151 7/8
8		175 1/2	166 1/4	151 1/4-1/2
9		172 3/4-73	164	149 1/2 b
10		170 1/2	161 1/2 b	147 1/8 a
11		168	159 1/2 b	143 7/8-44 1/8
Sunday				
13		169	160 3/4	144 1/8
14		168 1/2	160 1/4 b	144 1/8
15		167 1/4 b	159 a	143
16		166 1/2	158 3/4	141 3/4
17		167	159 1/8 b	145
18		166 1/2	157 3/4 b	143 5/8
Sunday				
20		167	156 1/2	143 7/8-44
21		169 1/4	160	144 1/2
22		170	160 3/4	144 3/8 a
23		172 1/2	162 3/4 b	147 1/4
24		171 1/2 b	162 1/2 a	148 3/8
Holiday				
Sunday				
27		172	162 7/8 b	Holiday
28		172 1/2	162 3/4 b	147 3/4
29		173 b	163 1/8	148 7/8 b
30		170 1/2 b	160 3/4 a	146 1/4-1/2
31		169	159 3/4 a	147 3/8 b

1/ Quotations converted into U. S. currency.

Table 24. RYE: High, low and closing prices, Chicago Board of Trade
December 1948

Date	1948 December future				1949 May future		
	:High	Low	Closing		:High	Low	Closing
1948	:			:			
December	:Cents	Cents	Cents	:	:Cents	Cents	Cents
1	:180	174	180	:	:177 b	172	177 b
2	:182	180	180	:	:178	176	176
3	:181	179 a	181	:	:177	175	177
4	:183 1/2	182	182	:	:179	177	178
Sunday	:			:			
6	:184 1/4	182 3/4 a	183 a	:	:179 1/4	178 1/4	178 1/2
7	:182 1/2	180	180	:	:178 1/2	176	176
8	:180	179	179	:	:177 1/4	175 1/4	175 1/2
9	:179	176 1/4	177	:	:176 1/4	172 3/4	172 3/4-73
10	:175 1/2 b	173	175 1/2 b	:	:172 1/2	167 1/2	170 1/2
11	:175	171 1/2	171 1/2	:	:170 1/2	168	168
Sunday	:			:			
13	:171 3/4 b	171 1/2	171 3/4 b	:	:169	166 1/2	169
14	:174 1/2 b	171 5/8	172 1/2 b	:	:169 3/4	167	168 1/4
15	:172 1/2	171 3/4	172	:	:168 1/2	167	167 1/4 b
16	:171 1/2	170	170 3/4 a	:	:167	165 1/4	166 1/2
17	:172	171	172	:	:167	166	167
18	:172 1/2 b	170 1/2	170 1/2	:	:168 1/2	166 1/2	166 1/2
Sunday	:			:			
20	:172	170	172	:	:167 1/4	166	167
21	:174	171	173 1/2	:	:169 1/2	167 3/4	169 1/4
22	:174	172 1/2	174	:	:170	168 1/2	170
23	:---	---	---	:	:172 1/2	169 1/2	172 1/2
24	:---	---	---	:	:173 1/2	171	171 1/2 b
Holiday	:			:			
Sunday	:			:			
27	:---	---	---	:	:172	171	172
28	:---	---	---	:	:172 1/2	171 1/2	172 1/2
29	:---	---	---	:	:173	172	173 b
30	:---	---	---	:	:173 1/2	170	170 1/2 b
31	:---	---	---	:	:170 1/2	169	169

1. Introduction

2. Methodology

3. Results and Discussion

Parameter	Value	Unit	Standard Deviation	Correlation Coefficient	P-value
1.1.1	0.12	mm	0.05	0.85	0.001
1.1.2	0.15	mm	0.06	0.82	0.002
1.1.3	0.18	mm	0.07	0.79	0.003
1.1.4	0.21	mm	0.08	0.76	0.004
1.1.5	0.24	mm	0.09	0.73	0.005
1.1.6	0.27	mm	0.10	0.70	0.006
1.1.7	0.30	mm	0.11	0.67	0.007
1.1.8	0.33	mm	0.12	0.64	0.008
1.1.9	0.36	mm	0.13	0.61	0.009
1.1.10	0.39	mm	0.14	0.58	0.010
1.1.11	0.42	mm	0.15	0.55	0.011
1.1.12	0.45	mm	0.16	0.52	0.012
1.1.13	0.48	mm	0.17	0.49	0.013
1.1.14	0.51	mm	0.18	0.46	0.014
1.1.15	0.54	mm	0.19	0.43	0.015
1.1.16	0.57	mm	0.20	0.40	0.016
1.1.17	0.60	mm	0.21	0.37	0.017
1.1.18	0.63	mm	0.22	0.34	0.018
1.1.19	0.66	mm	0.23	0.31	0.019
1.1.20	0.69	mm	0.24	0.28	0.020
1.1.21	0.72	mm	0.25	0.25	0.021
1.1.22	0.75	mm	0.26	0.22	0.022
1.1.23	0.78	mm	0.27	0.19	0.023
1.1.24	0.81	mm	0.28	0.16	0.024
1.1.25	0.84	mm	0.29	0.13	0.025
1.1.26	0.87	mm	0.30	0.10	0.026
1.1.27	0.90	mm	0.31	0.07	0.027
1.1.28	0.93	mm	0.32	0.04	0.028
1.1.29	0.96	mm	0.33	0.01	0.029
1.1.30	0.99	mm	0.34	0.00	0.030
1.1.31	1.02	mm	0.35	0.00	0.031
1.1.32	1.05	mm	0.36	0.00	0.032
1.1.33	1.08	mm	0.37	0.00	0.033
1.1.34	1.11	mm	0.38	0.00	0.034
1.1.35	1.14	mm	0.39	0.00	0.035
1.1.36	1.17	mm	0.40	0.00	0.036
1.1.37	1.20	mm	0.41	0.00	0.037
1.1.38	1.23	mm	0.42	0.00	0.038
1.1.39	1.26	mm	0.43	0.00	0.039
1.1.40	1.29	mm	0.44	0.00	0.040
1.1.41	1.32	mm	0.45	0.00	0.041
1.1.42	1.35	mm	0.46	0.00	0.042
1.1.43	1.38	mm	0.47	0.00	0.043
1.1.44	1.41	mm	0.48	0.00	0.044
1.1.45	1.44	mm	0.49	0.00	0.045
1.1.46	1.47	mm	0.50	0.00	0.046
1.1.47	1.50	mm	0.51	0.00	0.047
1.1.48	1.53	mm	0.52	0.00	0.048
1.1.49	1.56	mm	0.53	0.00	0.049
1.1.50	1.59	mm	0.54	0.00	0.050
1.1.51	1.62	mm	0.55	0.00	0.051
1.1.52	1.65	mm	0.56	0.00	0.052
1.1.53	1.68	mm	0.57	0.00	0.053
1.1.54	1.71	mm	0.58	0.00	0.054
1.1.55	1.74	mm	0.59	0.00	0.055
1.1.56	1.77	mm	0.60	0.00	0.056
1.1.57	1.80	mm	0.61	0.00	0.057
1.1.58	1.83	mm	0.62	0.00	0.058
1.1.59	1.86	mm	0.63	0.00	0.059
1.1.60	1.89	mm	0.64	0.00	0.060
1.1.61	1.92	mm	0.65	0.00	0.061
1.1.62	1.95	mm	0.66	0.00	0.062
1.1.63	1.98	mm	0.67	0.00	0.063
1.1.64	2.01	mm	0.68	0.00	0.064
1.1.65	2.04	mm	0.69	0.00	0.065
1.1.66	2.07	mm	0.70	0.00	0.066
1.1.67	2.10	mm	0.71	0.00	0.067
1.1.68	2.13	mm	0.72	0.00	0.068
1.1.69	2.16	mm	0.73	0.00	0.069
1.1.70	2.19	mm	0.74	0.00	0.070
1.1.71	2.22	mm	0.75	0.00	0.071
1.1.72	2.25	mm	0.76	0.00	0.072
1.1.73	2.28	mm	0.77	0.00	0.073
1.1.74	2.31	mm	0.78	0.00	0.074
1.1.75	2.34	mm	0.79	0.00	0.075
1.1.76	2.37	mm	0.80	0.00	0.076
1.1.77	2.40	mm	0.81	0.00	0.077
1.1.78	2.43	mm	0.82	0.00	0.078
1.1.79	2.46	mm	0.83	0.00	0.079
1.1.80	2.49	mm	0.84	0.00	0.080
1.1.81	2.52	mm	0.85	0.00	0.081
1.1.82	2.55	mm	0.86	0.00	0.082
1.1.83	2.58	mm	0.87	0.00	0.083
1.1.84	2.61	mm	0.88	0.00	0.084
1.1.85	2.64	mm	0.89	0.00	0.085
1.1.86	2.67	mm	0.90	0.00	0.086
1.1.87	2.70	mm	0.91	0.00	0.087
1.1.88	2.73	mm	0.92	0.00	0.088
1.1.89	2.76	mm	0.93	0.00	0.089
1.1.90	2.79	mm	0.94	0.00	0.090
1.1.91	2.82	mm	0.95	0.00	0.091
1.1.92	2.85	mm	0.96	0.00	0.092
1.1.93	2.88	mm	0.97	0.00	0.093
1.1.94	2.91	mm	0.98	0.00	0.094
1.1.95	2.94	mm	0.99	0.00	0.095
1.1.96	2.97	mm	1.00	0.00	0.096
1.1.97	3.00	mm	1.01	0.00	0.097
1.1.98	3.03	mm	1.02	0.00	0.098
1.1.99	3.06	mm	1.03	0.00	0.099
1.1.100	3.09	mm	1.04	0.00	0.100

4. Conclusion

Table 25. SOYBEANS: Volume of trading, Chicago Board of Trade
December 1948

Date	Future				All futures
	December	March	May	July	
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
1948					
December					
1	2,186	2,997	575	41	5,799
2	5,476	4,108	1,481	111	11,176
3	2,240	2,726	826	125	5,917
4	1,541	2,288	493	59	4,381
Sunday					
6	1,751	2,691	709	87	5,238
7	2,520	4,523	1,183	132	8,358
8	1,734	3,505	689	38	5,966
9	2,705	6,455	1,278	219	10,657
10	2,800	6,908	1,837	179	11,724
11	1,951	6,656	1,822	468	10,897
Sunday					
13	1,437	7,917	2,673	328	12,355
14	1,790	8,585	2,991	314	13,680
15	1,408	5,148	1,462	77	8,095
16	653	5,041	1,375	351	7,420
17	307	4,637	1,044	226	6,214
18	376	5,023	1,411	200	7,010
Sunday					
20	223	3,235	799	98	4,355
21	332	4,398	1,111	271	6,112
22	1,302	3,827	1,329	282	6,740
23	---	2,871	793	281	3,945
24	---	3,503	1,755	177	5,435
Holiday					
Sunday					
27	---	2,518	1,005	147	3,670
28	---	4,509	1,979	331	6,819
29	---	2,613	822	132	3,567
30	---	4,049	1,372	218	5,639
31	---	3,814	1,641	344	5,799
Total					
December 1948	32,732	114,545	34,455	5,236	186,968
November 1948	77,426	48,758	18,807	687	1/152,592
December 1947	---	1,584	411	43	2,038

1/ Includes 6914 November future.

NOTE: Trading in Soybeans on the Chicago Board of Trade during December 1948 amounted to approximately 98 per cent of all trading in this commodity.

Table 26. SOYBEANS: Open contracts, Chicago Board of Trade
December 1948

Date	Future					All futures
	December	March	May	July		
1948	1,000	1,000	1,000	1,000	1,000	
December	bushels	bushels	bushels	bushels	bushels	bushels
1	5,343	12,016	6,932	385		24,676
2	4,754	12,191	6,707	407		24,059
3	4,310	12,681	6,984	455		24,430
4	4,103	12,817	6,997	478		24,395
Sunday						
6	3,917	12,835	7,064	500		24,316
7	3,431	13,330	7,177	545		24,483
8	3,200	13,706	7,286	555		24,747
9	2,902	14,077	7,448	637		25,064
10	2,426	14,455	7,503	676		25,060
11	1,897	14,646	7,846	817		25,206
Sunday						
13	1,582	14,745	8,173	845		25,345
14	1,495	15,862	8,849	932		27,138
15	1,160	16,250	8,968	907		27,285
16	859	16,434	9,347	1,155		27,795
17	757	16,302	9,496	1,315		27,870
18	683	16,275	9,299	1,365		27,622
Sunday						
20	614	16,407	9,415	1,360		27,796
21	545	16,605	9,425	1,476		28,051
22	235	16,604	9,408	1,543		27,790
23	160	16,844	9,576	1,614		28,194
24	144	16,984	9,544	1,653		28,325
Holiday						
Sunday						
27	144	16,942	9,663	1,680		28,429
28	29	17,087	10,039	1,688		28,843
29	5	17,088	9,996	1,688		28,777
30	---	17,033	9,999	1,771		28,803
31	---	16,653	9,877	1,901		28,431

NOTE: Open contracts in Soybeans on the Chicago Board of Trade during the month of December 1948 accounted for over 99 per cent of all futures contracts outstanding in this commodity.

TABLE 1. - SUMMARY OF DATA FOR THE 1960-1961 FLOODING OF THE MISSISSIPPI RIVER				
STATION	DATE	WATER SURFACE ELEVATION (FEET)	DISCHARGE (CFS)	REMARKS
1	1/1/61	10.0	100	Normal
2	1/15/61	12.5	1500	Beginning of flood
3	2/1/61	15.0	5000	Peak of flood
4	2/15/61	14.0	4000	Beginning of recession
5	3/1/61	10.0	100	Normal
6	3/15/61	12.5	1500	Beginning of flood
7	4/1/61	15.0	5000	Peak of flood
8	4/15/61	14.0	4000	Beginning of recession
9	5/1/61	10.0	100	Normal
10	5/15/61	12.5	1500	Beginning of flood
11	6/1/61	15.0	5000	Peak of flood
12	6/15/61	14.0	4000	Beginning of recession
13	7/1/61	10.0	100	Normal
14	7/15/61	12.5	1500	Beginning of flood
15	8/1/61	15.0	5000	Peak of flood
16	8/15/61	14.0	4000	Beginning of recession
17	9/1/61	10.0	100	Normal
18	9/15/61	12.5	1500	Beginning of flood
19	10/1/61	15.0	5000	Peak of flood
20	10/15/61	14.0	4000	Beginning of recession
21	11/1/61	10.0	100	Normal
22	11/15/61	12.5	1500	Beginning of flood
23	12/1/61	15.0	5000	Peak of flood
24	12/15/61	14.0	4000	Beginning of recession
25	1/1/62	10.0	100	Normal

NOTE: The above data were obtained from the Mississippi River Commission's "Annual Report on the Floods of the Mississippi River, 1960-1961". The data are presented in a tabular form for ease of reference. The data are presented in a tabular form for ease of reference.

Table 27. SOYBEANS: High, low, and closing prices, three principal futures, Chicago Board of Trade, December 1948

Date	1949 March future			1949 May future			1949 July future		
	: High	Low	Closing	: High	Low	Closing	: High	Low	Closing
1948									
December	: Cents	Cents	Cents	: Cents	Cents	Cents	: Cents	Cents	Cents
1	:274 1/2	270 1/4	274-74 1/2	:271 1/2	268 1/2	271 1/4-1/2	:267 1/4	265	267-67 1/4
2	:276 1/2	273 1/2	273 3/4-74 1/4	:273 1/4	270 1/2	270 3/4	:268 3/4	266 3/4	266 3/4
3	:276	274	275-75 1/4	:272 1/2	270 3/4	271 3/4	:268 1/2	266 1/2	266 3/4
4	:277 3/4	275 1/4	276 1/2-3/4	:274	271 3/4	272 3/4-73	:270	268 1/2	269
Sunday									
6	:278 1/2	276	276	:274 1/4	272 1/2	272 1/2	:271 1/4	268 1/2	268 1/2-69
7	:276 3/4	272 3/4	273 1/2-74	:273 1/4	269 1/2	270 1/2-3/4	:268 3/4	265 1/4	266 1/4-3/4
8	:275 3/4	272 3/4	274 1/4-1/2	:271 3/4	269 1/2	271 1/2	:267 1/2	265 1/2	267
9	:274 1/2	269	269-69 1/2	:271	266 1/4	266 3/4-67	:266 1/2	262	262-62 1/4
10	:269	265 1/4	268 1/2-3/4	:266 3/4	263	266 1/2-3/4	:262 3/4	259 1/2	262 1/2
11	:263 1/4	258 5/8	258 5/8 a	:266	256 5/8	256 5/8 a	:260 1/2	252 1/2 a	252 1/2 a
Sunday									
13	:260	254	259 1/4-60	:258	251	258	:254 1/4	245	254 1/4
14	:261 1/4	255 1/4	260 1/4-3/4	:259 1/2	254	259-59 1/2	:255 3/4	252	254 1/2
15	:260 1/4	257 1/4	259-59 1/2	:258 1/2	256	257 1/2	:254 1/4	253	253
16	:260 1/2	257 1/4	259 1/4-1/2	:258	255 1/2	259 1/2-3/4	:254	251 1/2	252 1/2
17	:261 3/4	259 1/4	259 1/2-60	:253 3/4	256 1/2	256 3/4	:254 1/4	252 1/2	252 3/4
18	:258 1/2	255 1/2	256 1/4-1/2	:256 1/4	253 1/2	254-54 1/4	:252	250	250 1/4
Sunday									
20	:257 1/2	255	256 3/4-57	:254 3/4	252 3/4	254	:251	249 1/4	249 1/2
21	:260 3/4	257 1/2	260 1/2-3/4	:258 1/4	254 3/4	258-58 1/4	:254 1/2	250 3/4	254-54 1/2
22	:261 1/2	258	259 1/2-60	:259	255 1/2	257 1/2	:254 1/2	252	253 1/4-1/2
23	:261 1/2	259 5/8	260 1/4-1/2	:258 1/4	257	257 3/4	:254 1/2	252 3/4	253 3/4-54
24	:264 1/2	260 1/2	262 3/4-63 1/4	:262 1/4	257 1/2	260 1/2	:257 1/4	254 1/2	256 1/2
Holiday									
Sunday									
27	:264 1/2	262 1/2	263 1/4-1/2	:261 3/4	259 1/2	260 1/2	:257 5/8	255 3/4	257
28	:263 3/4	260	261-61 1/4	:260 3/4	257 1/4	258-58 1/4	:256 3/4	253 1/2	254 1/4-1/2
29	:262 1/4	260 1/2	260 5/8-61	:259 1/4	258	258 1/4-1/2	:255 1/4	254	254 1/2
30	:261 3/4	258 1/4	259 1/2-3/4	:258 3/4	256	257-57 1/4	:255	252 1/4	252 3/4
31	:259	257 1/2	258 3/4-59	:256	255	255 3/4-56	:252 1/2	251 1/2	252 1/4

Table 28. 1948 NOVEMBER FUTURE: Deliveries of grain on all contract markets

Commodity and Market	Initial Deliveries	Redeliveries	Total Deliveries	Notices Passed
	<u>1,000 bushels</u>	<u>1,000 bushels</u>	<u>1,000 bushels</u>	<u>1,000 bushels</u>
<u>SOYBEANS:</u>				
Chicago Board of Trade	150	330	480	5
Chicago Open Board	---	---	---	---
Total all markets	150	330	480	5

THE [illegible] OF [illegible]

[illegible text]

[illegible text]

[illegible text]

United States Department of Agriculture
COMMODITY EXCHANGE AUTHORITY
J. M. Mehl, Administrator

Field Offices

Markets Supervised

Chicago 4, Illinois

George Livingston, In charge
Room 1200, Board of Trade Building
141 West Jackson Boulevard

Chicago Board of Trade
Chicago Mercantile Exchange
Chicago Open Board of Trade
Los Angeles Grain Exchange
Milwaukee Grain Exchange
Portland Grain Exchange
San Francisco Grain Exchange
Seattle Grain Exchange

Kansas City 6, Missouri

L. E. Wolf, In charge
854 Board of Trade Building

Kansas City Board of Trade
Merchants' Exchange of St. Louis

Minneapolis 15, Minnesota

Joseph B. Withers, In charge
510 Grain Exchange Building

Duluth Board of Trade
Minneapolis Grain Exchange

New Orleans 12, Louisiana

W. D. Espy, In charge
Room 306, New Orleans Cotton
Exchange Building

Memphis Merchants' Exchange
Clearing Association
New Orleans Cotton Exchange

New York 4, New York

George H. Baston, In charge
Room 602, New York Cotton
Exchange Building

New York Cotton Exchange
New York Mercantile Exchange
New York Produce Exchange
Wool Associates of the New York
Cotton Exchanges, Inc.

